

RICHMOND POLICE DEPARTMENT



11-6 CRIME ANALYSIS UNIT OPERATING MANUAL

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Chief of Police or Designee

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PURPOSE

The major goal/objective of the Crime Analysis Unit is to detect crime patterns and series and to provide information necessary to identify criminal offenders. The information must be timely and pertinent. The information provided should assist both operational and administrative personnel in planning of deployment of resources for the prevention and suppression of crime. The unit is also a tool aiding in investigations, increasing the apprehension process and the clearance of cases.

The Crime Analysis Unit is proactive, providing the needed information to patrol and detectives to combat crime. Also, each section, division, unit in the Department may turn to the Crime Analysis Unit for assistance.

The Richmond Police Department's Crime Analysis Unit (CAU) was formed in 1991. The unit was placed in Planning Division under the organizational structure of Administration. The CAU was made up of one sworn sergeant, two analysts, and a clerk typist who would later be promoted to an assistant crime analyst.

In 1996 the unit was transferred and assigned to Investigative Services. The next big change came in 1998 when Field Operations hired four crime analysts, one for each precinct. It was at this point that the unit became decentralized with the precinct analyst reporting to a precinct uniformed supervisor. Several analysts remained centralized at Headquarters in Investigative Services.

The Crime Analysis Unit would once again become centralized back at Headquarters in the year 2000. Once again the unit underwent decentralization in the spring of 2005 by placing analysts in the precincts and at Headquarters. They would later be centralized again in the beginning of 2006. The analyst that had been assigned to precincts remained assigned to the precincts but located at Headquarters. The unit currently maintains a civilian supervisor and five civilian crime analysts.

Initially, the unit utilized the RAMMS crime analysis package designed by John Simmons. The unit later moved to a customized program called C.I.A.S. (Crime Analysis Information and Analysis System) modified and designed by one of the unit's analysts. With the coming of the new millennium, the customized program used to analyze crime was not compatible to the new reporting method IBR and the unit had to move in a different direction. The unit also used MapInfo and then moved to Arcview in 1999. The unit currently uses ArcGIS9 for its mapping and uses the Department's records management system, PISTOL to pull data for analysis. Crystal Reports are used for extracting and presenting data in comparison forms as well as for reports.

POLICY

CONFIDENTIALITY & FOIA

The information accessed and prepared by the Crime Analysis Unit for the most part is considered confidential in nature and for law enforcement use only. The analysts are to adhere to the General Order 109-1 as it applies to the release of information. All requests from the Public (citizen, student, media, etc...) are to be forwarded to the Public Affairs Unit for processing. This does not mean that the CAU will not be called upon to assist with filling requests or answering questions.

The authority to release official records and/or information of any type shall be limited to the Chief of Police, Assistant Chief of Police, OIC of Central Records Unit, Office of the General Council and Public Information Officer or individuals specifically designated by them.

PRIORITIES

There are three functions of crime analysis: Tactical, strategic, and administrative.

1. Tactical – This is the most important function of crime analysis. This type of analysis assists patrol and detectives in identifying crime problems and assists in the arrest of the offenders (Trends/Patterns/Series).
2. Strategic - Crime Trends, this is a long term look at the increase/decrease of crime.
3. Administrative – Provides the nice to know stuff, information that can be used for grants, feasibility studies, special research projects, speeches, and city council reports.

FUNCTION

The goals can be achieved through these functions:

1. Identifying crime pattern and series
2. Forecasting future crimes
3. Target profile analysis
4. Provision of investigative leads
5. Providing support data for community policing (Sector) and crime prevention (Community Care Unit).
6. Assist with case clearances.
7. Support Departmental planning activities.
8. Analysis of operational data

PROCEDURE

METHODS/APPLICATION FOR CRIME ANALYSIS

1. Identify evolving/existing crime patterns and series.
 - a. Crime Pattern – occurrence of similar offenses in a defined geographic area (sector, census tract, neighborhood).
 - b. Crime Series – crime pattern where there is reason to believe that the same person(s) are committing the crime.
2. Forecasting future crime occurrences – analysis of MO patterns (i.e.: date, day of week, time, and location) the analyst can come to some conclusion of future events.
 - a. When possible analyst will use mathematical formulas for forecasting a 68% chance of accuracy when the next crime will occur for the series they have developed. This can only be done when there is a normal distribution of time.
 - b. Locations - Use maps and other resources to identify possible locations.
 - c. Note there could be reasons as to why forecasting does not come true.
3. Target Profile Analysis – Id's the type of person(s) {victim(s)/suspect(s)}, structure(s)/place(s), and vehicle(s) that might become a target for a crime. This assists police in developing action plans as well as directed patrol plans. It can also help public by warning them of existing criminal activity.
4. Investigative leads - Analyst research files for previous arrested person(s)/known offenders that match the suspect description and MO. This information can help identify and locate the subject.
5. Support Data for community policing and crime prevention – When needed the crime analysis unit will assist the PIO in providing data for community policing needs. CAU will also forward all special reports/advisories to the Community Care Unit and the Public Affairs Unit.
6. Case Clearance – Analyst will assist in identifying possible cases that could be related to offender(s) that have been arrested.
7. Provide data to support Departmental Planning Activities
8. Provide operational data for deployment planning, resource allocation and budgeting.

TYPES OF REPORT/DOCUMENTS

The following are examples of requested and proactive work of crime analysis:

1. **Special Reports** – A special report identifies the series of a crime. The report should be an overview of the supporting documentation. It should provide the officers/detectives with crime, MO, suspect description, date, time, day of week, weapon(s), vehicle descriptions and any and all pertinent information. Some times special reports can also generate forecasting of next date/time (See Template). Reports are provided to Chief of Police, Assistant Chief, Majors, Captains, Lieutenants, Sergeants, Planning OIC, Executive Director of Administration, Public Affairs OIC, surrounding agencies, and Crime Analysis Unit.
2. **Advisory** – Report prepared based on information provided from other jurisdictions/law enforcement agencies. The information provided from other jurisdictions/agencies is researched for relevancy to the Richmond Area. If there appears to be possible connection based on similar incidents, patterns, trends, and or target the analyst will prepare an advisory to be distributed. Reports are provided to Chief of Police, Assistant Chief, Majors, Captains, Lieutenants, Sergeants, Planning OIC, Executive Director of Administration, Public Affairs OIC, surrounding agencies, and Crime Analysis Unit.
3. **FYI Report** (Info/Pattern/Trend) – Report prepared as an informative tool on a particular topic and should not be confused with the previous reports (Special and Advisory). This report identifies areas that can not be classified as a series but has potential of progressing. There are no signs at the time that they are related. Reports are provided to affected areas Captains, Lieutenants, Sergeants, surrounding agencies, and Crime Analysis Unit.
4. **Threshold Analysis** – this report should be provided on a monthly, quarterly, and yearly basis. It can help the supervisors and administrative to objectively look at the range that can be expected based on a five or more year review (See Template).

To prepare a threshold analysis you must use five (5) or more year's worth of data.

- a. Confidence level = 68%
 - b. Use the mean +/- standard deviation to obtain the threshold.
 - c. Provide the mean and threshold ranges in the report
5. **Comparison Reports** – This is the nice to know information. Provides an overview as to where we stand to the previous time frame. This type of information can be used for Target, community meetings, and monthly reports (Crystal Reports – see example below).



RICHMOND POLICE DEPARTMENT

Sector 111

IBR

Reporting Period: 1/1/2006 through 5/10/2006

Violent Crimes	Period 2005	Period 2006	Period Change	Period %Change	YTD 2005	YTD 2006	YTD Change	YTD %Change	Pre-Period YTD % Change
09A Homicide Total	3	2	-1	-33%	3	2	-1	-33%	0%
09A Homicide Firearms	2	1	-1	-50%	2	1	-1	-50%	
Percent 09A Homicide Committed using Firearms	67%	50%			67%	50%			
11A Rape Total	1	3	2	200%	1	3	2	200%	0%
11A Rape Firearms	0	0	0	0%	0	0	0	0%	
Percent 11A Rape Committed using Firearms	0%	0%			0%	0%			
120E ROBBERY/COMMERCIAL HOUSE	0	2	2	N/A	0	2	2	N/A	0%
120 Robbery /Business Total	0	2	2	N/A	0	2	2	N/A	0%
120 Robbery /Business Firearms	0	1	1	N/A	0	1	1	N/A	
Percent 120 Robbery /Business Committed using Firearms	100%	50%			100%	50%			
120A ROBBERY/INDIVIDUAL	22	14	-8	-36%	22	14	-8	-36%	0%
120B ROBBERY/CARJACKING	1	2	1	100%	1	2	1	100%	0%
120 Robbery /Individual Total	23	16	-7	-30%	23	16	-7	-30%	0%
120 Robbery /Individual Firearms	14	8	-6	-42%	14	8	-6	-42%	
Percent 120 Robbery /Individual Committed using Firearms	61%	50%			61%	50%			
13A1 AGGRAVATED ASSAULT	36	20	-16	-44%	36	20	-16	-44%	0%
13A2 AGGR ASSAULT ATTEMPTED MURDER	1	1	0	0%	1	1	0	0%	0%
13A4 AGGRAVATED ASSAULT DOMESTIC	3	5	2	66%	3	5	2	66%	0%
13A Aggravated Assault Total	40	26	-14	-35%	40	26	-14	-35%	0%
13A Aggravated Assault Firearms	14	11	-3	-21%	14	11	-3	-21%	
Percent 13A Aggravated Assault Committed using Firearms	35%	42%			35%	42%			
Total for Violent Crimes	67	49	-18	-26%	67	49	-18	-26%	0%



RICHMOND POLICE DEPARTMENT

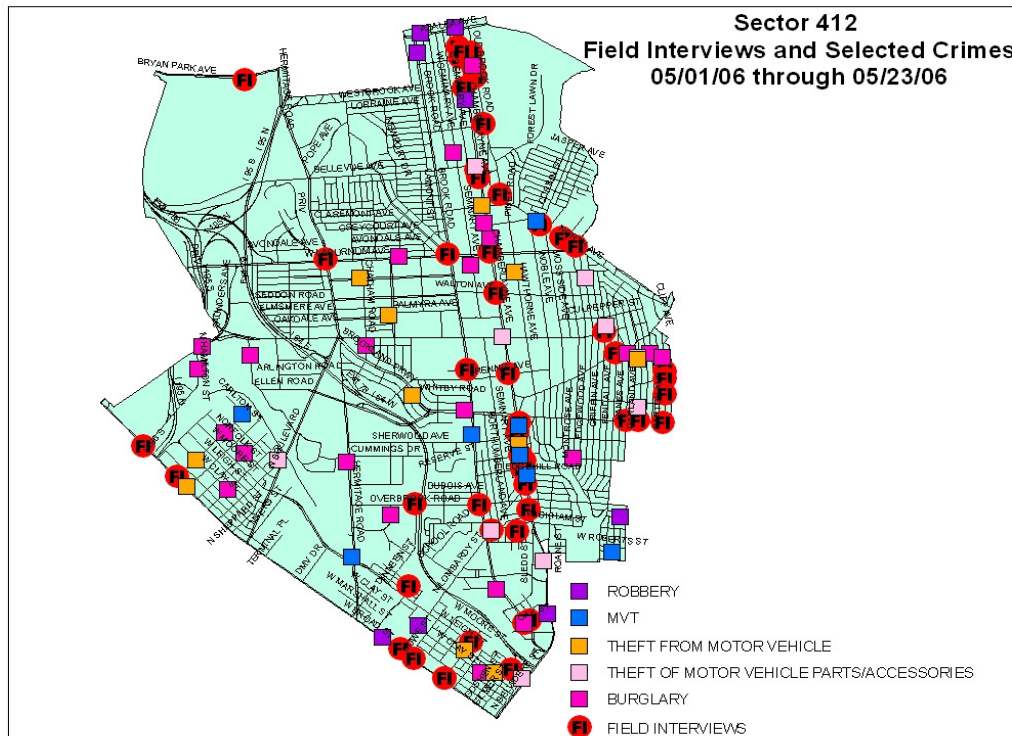
Sector 111

IBR

Reporting Period: 1/1/2006 through 5/10/2006

Property Crimes	Period 2005	Period 2006	Period Change	Period %Change	YTD 2005	YTD 2006	YTD Change	YTD %Change	Pre-Period YTD % Change
200 Arson Total	2	1	-1	-50%	2	1	-1	-50%	0%
220A BURGLARY/B&E/RESIDENTIAL	37	27	-10	-27%	37	27	-10	-27%	0%
220B BURGLARY/B&E/COMMERCIAL	5	6	1	20%	5	6	1	20%	0%
220C BURGLARY/B&E/OUTBUILDING	0	7	7	N/A	0	7	7	N/A	0%
220 Burglary Total	42	40	-2	-4%	42	40	-2	-4%	0%
23A PICKPOCKET	1	0	-1	-100%	1	0	-1	-100%	0%
23B PURSE SNATCHING	1	1	0	0%	1	1	0	0%	0%
23C SHOPLIFTING	0	3	3	N/A	0	3	3	N/A	0%
23D THEFT FROM BUILDING	28	20	-8	-28%	28	20	-8	-28%	0%
23E THEFT FROM COIN OPERATED MACHINE OR DEVICE	1	1	0	0%	1	1	0	0%	0%
23F THEFT FROM MOTOR VEHICLE	83	47	-36	-43%	83	47	-36	-43%	0%
23G THEFT OF MOTOR VEHICLE PARTS/ACCESSORIES	31	23	-8	-25%	31	23	-8	-25%	0%
23H ALL OTHER LARCENY	56	36	-20	-35%	56	36	-20	-35%	0%
23I GAS DRIVE OFF	2	0	-2	-100%	2	0	-2	-100%	0%
23 Larceny Total	202	131	-71	-35%	202	131	-71	-35%	0%
240 MOTOR VEHICLE THEFT	56	22	-34	-60%	56	22	-34	-60%	0%
240A UNAUTHORIZED USE OF A MOTOR VEHICLE	11	2	-9	-81%	11	2	-9	-81%	0%
240 Auto Theft Total	67	24	-43	-64%	67	24	-43	-64%	0%
Total for Property Crimes	313	196	-117	-37%	313	196	-117	-37%	0%
Grand Total Major Crimes	380	245	-135	-35%	380	245	-135	-35%	0%

6. **Mapping** – Mapping can be used for a variety of things such as special reports (mapping crime series), mapping of trends/patterns, deployment, comparisons, and strategic planning just to name a few. Mapping provides a good visual, can be used as an overlay to plot multiple items and can be



used as surveillance.

7. **Clearance of cases** – report to assist detectives in clearing cases.
8. **Feedback Form** – several times through out the year the Crime Analysis Unit will provide Feedback forms to the end user of the information being provided such as projects/reports, advisories, maps, and special reports. The feedback forms will be used to evaluate the effectiveness and usefulness of the data provided. Information provided back will assist the unit in providing the information needed to the end user (field service/investigative services).
9. **Bio's** – Upon request, the analysts will use a variety of resources to gather information about a subject. This information includes DMV checks, Virginia Employment Commission check, Criminal History check, etc. After this information is gathered, a 'bio' sheet on the subject can be completed. This is a one-page format that outlines/synopsizes of the data gathered from the outside resources. This is presented as the top page along with the supporting documentation to the requesting officer or detective.
10. **Business Licenses:** The analyst can access information about business licenses through the SCC website (<http://www.scc.virginia.gov/index.htm>). By clicking on

the 'clerk's information system' button at the bottom of the listed web-page, than analyst can query a business by name and gather information about their SCC filing status, listed registered agents and officers, and associated addresses.

11. **Link Analysis (i2)** – This is a visual representation of names, faces, relationships and events. I2 can be used to show an organization and its hierarchy and structure. I2 can be used to create timelines of events. I2 can also be used to show how people, events, locations, etc. are connected.
12. **CrimeNtel Reports** – All reports generated from CrimeNtel these reports will be used to assist detectives and officers in their crime reduction. This application should be used every time a name, address, vehicle is checked.
13. **Retaliation Assessment Tool** - this form must be distributed as soon after a shooting or homicide as possible. **This is a priority.**

This form will give officers in the affected areas some idea of what that particular shooting case involved.

The form should be no longer than 1 page and does not need to contain in depth analysis or linkage.

- a. The RAT will include the victim's name, and photo if available.
- b. The Rat will include suspects name if known, and photo. If not known suspect physical and clothing description.
- c. A summary of the shooting/ Date/Time/ Place/ Circumstances to include others involved.
- d. A summary of where the victim and or suspects have involvements. Ie Resides 3600 Logandale, Pistol involvements in Hillside Court, and Gilpin
- e. A summary of Pistol involvements for the victim/and suspect if known i.e. Drug involvement/Robbery/ Trespass/ Banned from Public House.
- f. The caliber of the weapon used i.e. 9 mm head stamp Win 9mm
- g. The name and contact information of the assigned detective.

An assessment from the Violent Crimes Lieutenant or Captain on the possibility of retaliation.

Low/ Medium/ High

If a shooting takes place on the weekend the Violent Crime Lieutenant will make the determination if the RAT needs to be done right away. If it does it will be done by the Violent Crime Sergeant.

14. **Target Review** – the analyst are responsible for preparing their assigned areas target review for final presentation in power point format.
 - a. Precinct

- Year-to-date Precinct by sector comparison report (Crystal Report)
- Specific time frame – Precinct by sector comparison report (Crystal Report)
- Prior weeks year-to-date by sector
- Clearance rate slide with national average
- Precinct - Violent/Property/Major Crime by month comparison for 2005 VS. 2006 (AKA – Keohane Slide)
- Year-to-date sector report
- Reporting time frame – Sector
- Sector – Violent/Property/Major Crime by month comparison for 2005 VS. 2006 (AKA – Keohane Slide). Provide any requested maps, analysis, listings, comparisons

b. Detective Division – Violent Crime

- Homicide numbers provided by Homicide Division (# incidents & # cleared YTD & IBR).
- Aggravated assault and rapes numbers for incidents and clearance pulled using Pistol.
- Murder clearance rate graph, Aggravated Assault clearance rate graph, and the Rape clearance rate graph.
- Provide listing of Aggravated Assaults (shootings) for the reporting period
- Provide listing of Rapes for the reporting period
- Pie graph – Rapes by Type
- Provide any other supporting documentation that may be needed.

DATA RESOURCES

The Crime Analysis Unit has access to various types of information. This information comes from a variety of sources available to the unit. The sources include but are not limited to the records management system (current & historical), GIS, VCIN/NCIC, VICAP, TIPS, CFS, DMV, VEC, Autotrac, and city/state mainframe.

1. Department of Motor Vehicles – Crime Analyst have access to DMV. The unit follows the guidelines set forth in the General Order.

2. VCIN/NCIC (Level B) – Crime Analyst is certified and given a level B access to VCIN/NCIC. The unit follows the guidelines set forth by the Virginia State Police and the Department’s General Order. The analyst can run criminal histories, check for warrants, and run DMV driver/vehicle information queries.
3. City/State Mainframe
 - a. DMV
 - b. City Utilities
 - c. City Real Estate
 - d. City Business Licenses
 - e. Virginia Employment Commission
 - f. SCC
4. CFS – Calls for service module allows the analyst to pull data by street, street range, 1990 census, and 1990 traffic zones.
 - a. Summary report
 - b. Citizen listing report – can be provided to the public
 - c. Law Enforcement listing report (law enforcement use only).
 - d. Top 50 CFS location listing report.
5. TIPS – A free program provided by Virginia State Police. This is a statewide information sharing database. It is used primarily to extract DMV photos. See letter reference the use of DMV pictures in TIPS. There is a memorandum of understanding as to the use of this program. Detectives and Officers must submit as much data regarding the subject as possible as well as the reason for the request or the type of investigation.
6. LexisNexis – Unit is provided access to public records housed by LexisNexis. This is a tool that can be used to locate, identify possible relatives, address, employment, phone numbers etc...
7. LexusNexus – Crime Analyst has access through a secure website to search for subject information. Information provided:
 - a. Present and prior addresses
 - b. Possible relatives
 - c. Vehicle registrations

- d. Neighbors/addresses
8. Pistol – Richmond Police Departments Records Management System
 9. IMATS – City Jail data base
 10. LInX – law Enforcement Information Exchange (LInX) – System designed to let authorized users access to accumulative knowledge of area law enforcement agencies in a systematic and ongoing manner to enhance the collective ability of the participating agencies to enforce the law, investigate crime, detect and prevent terrorism, and to assist law enforcement leadership in the development of enforcement and prevention strategies, both individual and collaborative. This is a data warehouse of mirrored information from contributing agency's and is not intended to be an official repository of original records or to be used as one. This is an application to facility the speedy sharing and querying of information that may be contributed from already existing files/RMSs of the agencies. The data is available to serve both tactical and analytical tool for law enforcement. The guidelines must be followed provided the agreement for using LInX (appendix 14).
 11. WEB
 12. **Crime Intel** – Searchable database presently used by Organized Crime Division for narcotics, gang and other intelligence information. The program provides reports, and basic link charting.
 13. ViCAP – This software provided free of charge by the FBI, allows local agencies to collect, collate, and analyze their own violent crime cases, and to upload their case data to a statewide/regional ViCAP database, and to the national ViCAP database to participate in a nationwide case comparison and analysis. The software also enables participating agencies to analyze and report their own statistical information using preformatted reports that assist in exploring the “how” and “why” of violent crimes in their respective jurisdictions.

In order to submit cases into ViCAP, the following protocol will be followed:

- The detective will contact his/her Sergeant with the potential case. The detective will have a written synopsis of the case or a case narrative which will be used in the actual ViCAP form.
- The Sergeant and the Lieutenant then meet to discuss the case and determine if it meets the standards for a ViCAP submission.
- When approved, the detective will schedule will schedule a time to enter the case into ViCAP with one of the trained ViCAP operators. The detective will want to familiarize himself with the 100+ questions before the meeting with the ViCAP operator.
- A log will be kept in a location to be determined as to which cases have been entered.

14. Probation & Parolee Website – Data provided by probation and Parole of those on probation in District 1. Information provided includes name, social security, DOB, address, charge, P&P Officer, etc...
15. Phone Records/Website Accounts/Etc... - In order to obtain subscriber and toll record information for a phone number the following steps will be taken:
 - a. Determine the phone company who is the provider. There are two websites which can assist in determining the phone company: www.primeris.com (phone finder), and www.whitepages.com.
 - b. Once a company has been determined, the second step is to check to see if the number has been ported to a different provider. The Nustar phone number is 571.434.5781. At that point you are prompted through the steps, and if a new provider is associated with the phone number, the provider and a contact number will be given.
 - c. A subpoena is faxed to the providing company. Subscriber information takes approximately a week, and toll records take from 3 to 6 weeks, the times vary with the company. A call may be made to the provider to confirm that they are the provider for that number, and that they are aware of the subpoena request.
 - d. Follow-up may be necessary. Someone in the provider's legal compliance area will be able to assist.

Appendix of Reports/Templates/Forms

1. Special Report
2. Advisory
3. Hot Spot Analysis
4. FYI Report
5. Threshold Analysis
6. Link Analysis
7. Time Lines
8. Feedback Form
9. Trendwatch
10. Bio's
11. Fax Cover Sheet
12. CFS (Examples: summary, citizen listing, comparison report)

13. PD-131 (RPD – Complete Criminal History Record Request)

14. LInX – Operation Rules

PERSONNEL AND TRAINING

The Crime Analysis Unit is made up of a supervisor and five crime analysts. One analyst is assigned to support each Precinct (4 Precincts), and one analyst to Major Crimes. Crime analysts are civilian employees of the department are hired based upon departmental vacancies and individual skill level. Minimum professional requirements include a Bachelor's degree in Criminal Justice or related field plus one year of experience in data analysis, crime analysis, research methods and/or education/training equivalent. Preferred candidates will have at least two years experience in crime analysis, excellent oral and written communication skills; and demonstrated knowledge of crime trends and forecasting.

Crime analysts are required to remain VCIN/NCIC certified at all times. Furthermore, it is the responsibility of the supervisor to see that each individual's skills are used to the best of their ability as well as build their skills and knowledge on the interests that that individual might have. The unit will work as a team in supporting each other as they support the Department.

Specialized training on software, applications, and methods of analysis will be provided as needed as it relates to analysis of crime, intelligence analysis, mapping, statistics, i2, CrimeNtel, and other resources used by the unit. Training on various subjects such as crime prevention, CPTED, Domestic Violence, etc. will also be provided to further the knowledge of the analysts to assist them in assisting the Department in the identification, suppression, and clearance of cases and crime.